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## On Two Sources of Second Position Effects (Part 2)<sup>1</sup>

### Abstract

This paper accounts for the distribution of two second position effects, the V2 (verb second) order observed in continental Germanic languages and second position cliticization, attested in some Slavic languages. The first part of this paper (Migdalski 2018), published in the previous issue of this journal, showed that it is necessary to distinguish two types of second position effects: one of them affects finite verbs and pronominal and auxiliary clitics, whereas the other one is restricted to the contexts of marked illocution and is observed among a small class of so-called operator clitics. Furthermore, the first part of Migdalski (2018) addressed Bošković's (2016) generalization concerning the distribution of clitics, which states that second position pronominal and auxiliary clitics are found only in languages without articles. It showed that although this generalization is empirically correct, it does not account for the distribution of auxiliary clitics and is not supported by diachronic considerations. The second part of this paper proposes an alternative generalization, which restricts verb-adjacent cliticization to tensed environments.

### Keywords

V2, clitics, Slavic, Germanic, tense, diachronic syntax

### Streszczenie

Niniejszy artykuł przedstawia analizę dwóch zjawisk składniowych, które są podporządkowane tzw. regule drugiej pozycji: zjawiska V2 obserwowanego we wszystkich językach germańskich oprócz angielskiego oraz klitycyzację drugiej pozycji (Wackernagela), która występuje w niektórych językach słowiańskich. Pierwsza część artykułu (Migdalski 2018), opublikowana w poprzednim numerze czasopisma, wskazała na konieczność rozróżnienia dwóch typów efektu drugiej pozycji: pierwszy z nich dotyczy finitywnych form czasownika oraz klityk zaimków osobowych i czasowników posiłkowych, a drugi typ jest odpowiedzialny za występowanie klityk zdaniowych w zdaniach wyrażających nacechowaną formę siły ilokucyjnej. Ponadto, pierwsza część artykułu nawiązywała do generalizacji Boškovića

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(2016) dotyczącej pozycji klityk w zdaniu. Generalizacja ta mówi, że klityki drugiej pozycji występują jedynie w językach bez przedimków. Artykuł ten wykazuje, że chociaż generalizacja ta jest empirycznie poprawna, to nie uwzględnia ona dystrybucji klityk czasowników posiłkowych i nie jest ona poparta obserwacjami diachronicznymi. Druga część artykułu, która jest zamieszczona poniżej, proponuje generalizację alternatywną, która wiąże obecność klityk przyczasownikowych w języku z dostępnością wykładników morfologicznych czasu.

### Słowa kluczowe

V2, klityki, języki słowiańskie, języki germańskie, czas, składnia diachroniczna

## 4. Parametrizing cliticization with respect to tense specification

In this section I develop a generalization which accounts for the availability of second position cliticization in Slavic. It is presented as an alternative to the generalization postulated by Bošković (2016), which was overviewed in Migdalski (2018). The generalization developed here relies on the presence of tense morphology. Only two contemporary Slavic languages have overt tense marking. These are Bulgarian and Macedonian, which feature two past tenses, aorist and imperfect. These tenses have an aspectual flavor in their semantics: the aorist is a narrative tense, which is used to describe temporally independent events. The imperfect characterizes actions as non-completed and emphasizes the repetition or the duration of an event. In addition, as virtually all other verbs in Slavic languages, aorist and imperfect forms encode aspectual distinctions via aspectual morphology, with the aorist usually marked for perfective and the imperfect for imperfective aspect. However, perfective verbs may also carry the morphology of the imperfect tense, and then they describe an unbounded repetitive or habitual situation, whereas aorist forms marked for imperfective aspect characterize events with no definite end-result (see Lindstedt 1985; Scatton 1984: 321–322; Rivero and Slavkov 2014). These facts are important for the description presented here because the possibility of encoding contradictory tense and aspect values on the verb points to the independence of the tense and aspect systems in Bulgarian. The examples in (1) and (2) provide tense and aspect combinations in Bulgarian with their approximate meanings in the English translations (see also Migdalski 2016: 244; Todorović 2016 for further discussion).

- |   |                               |            |  |
|---|-------------------------------|------------|--|
| (1) a. Včera                            | četjax                        | knigata    |  |
| yesterday                               | read <sub>IMP.1SG.IMPRF</sub> | book-the   |  |
| “I was reading the book yesterday       |                               |            | (Bg, imperfect tense, imperfective aspect) |
| b. Vseki dan,                           | pročetjax                     | edna kniga |  |
| every day                               | read <sub>IMP.1SG.PERF</sub>  | one book   |  |
| “I used to read a whole book every day” |                               |            | (Bg, imperfect tense, perfective aspect)   |

- (2) a. Včera                      pročetoх                      knigata  
          yesterday                  read<sub>AOR.1SG.PERF</sub>                  book-the  
          “I read the book yesterday and finished it”                  (Bg, aorist, perfective aspect)
- b. Včera                      četoх                      knigata  
          yesterday                  read<sub>AOR.1SG.IMPRF</sub>                  book-the  
          “I was reading the book yesterday”                  (Bg, aorist, imperfective aspect)

The tense and aspect system observed in Bulgarian is a continuation of structures attested in Old Church Slavonic, which are presented in (3) for the verb *nesti* ‘to carry.’ Of particular relevance are the three complex tense constructions, Future II, present perfect, and pluperfect, formed with different aspectual variants of the verb ‘be’ as the auxiliary (the perfective form of ‘be’ in Future II; the present tense imperfective form of ‘be’ in the present perfect, and the imperfective aorist or imperfect form of ‘be’ in the pluperfect), accompanied by the main verb, the so-called *l*-participle. Like all other verbs in Slavic, the *l*-participle may occur in the perfective or imperfective forms. On a par with other participles used in complex tenses crosslinguistically, it is a non-finite, tenseless form that is used in both future and past structures.

(3) Table 1. Tense and aspect forms in OCS

TENSE/ASPECT	IMPERFECTIVE	PERFECTIVE
3SG PRESENT	nesetъ	ponesetъ
3SG AORIST	nese	ponese
3SG IMPERFECT	nesěaše	ponesěaše
3SG FUTURE II	bōdetъ neslъ	bōdetъ poneslъ
3SG PERFECT	neslъ jestъ	poneslъ jestъ
3SG PLUPERFECT	bě neslъ	bě poneslъ

(OCS, partly based on Van Schooneveld 1951: 97)

All the Slavic languages except for Bulgarian and Macedonian lost the aorist and the imperfect in their history. The loss can be suitably exemplified on the basis of Serbo-Croatian. In contemporary Serbo-Croatian, the occurrence of the aorist is subject to cross-dialectal variation, and it is arguably most widespread in Montenegro (see Lindstedt 1994: 39). Moreover, it seems that the aorist is used for stylistic purposes rather than to render temporal information. For instance, it may express “surprisingly perceived events” (Browne 2002: 330), which correlates with the usage of the so-called “hot news perfect” in English, which describes events that were completed immediately before the moment of speaking (Lindstedt 1994: 36), as illustrated in (4). Crosslinguistically “hot news perfect” describes a non-temporal relation, as it mainly characterizes an event that is regarded as noteworthy (see Portner 2003).

- (4) a. Stiče ti napokon. Dugo sam te čekao  
 arrive<sub>AOR.2SG</sub> you at last long am<sub>AUX</sub> you wait<sub>PART.M.SG</sub>  
 “You have arrived at last! I have been waiting for you for a long time”  
 b. Majko, evo dođe otac  
 mother<sub>VOC</sub> there come<sub>AOR.3SG</sub> father<sub>NOM</sub>  
 “Look Mother, Father has just arrived” (S-C; Lindstedt 1994: 37)

A number of other non-past-related usages of aorist in Serbo-Croatian have recently been examined by Todorović (2016). She shows that aorist-marked verbs may have habitual (see 5) or even future interpretations (illustrated in 6; see also Arsenijević 2013).

- (5) Ne diraj mi kompjuter – ti pokvari sve što dotakneš  
 not touch me<sub>DAT</sub> computer you break<sub>AOR.2SG</sub> all that touch<sub>PRES.2SG</sub>  
 “Don’t touch my computer, you break everything you handle!”  
 (S-C; Riđanović 2012: 316)
- (6) a. Ako ne budemo odlučni, propadoše nam svi planovi  
 if not are<sub>PERF</sub> decisive fall-through<sub>AOR.3P</sub> us<sub>ACC</sub> all plans  
 “If we are not decisive, all our plans will fall through”  
 b. Nema nam spasa, pomriješmo od gladi!  
 not+has us<sub>ACC</sub> salvation die<sub>AOR.1PL</sub> from hunger  
 “We can’t be saved – we will starve to death” (S-C; Riđanović 2012: 317)

Furthermore, Todorović (2016) points out aorist forms tend to highlight certain aspectual properties rather than temporal ones, such as completeness of an event (as in 7a) or its punctuality (as in 7b).

- (7) a. (Konačno) napisah domaći!  
 finally write<sub>AOR.1SG</sub> homework  
 “I finally finished my homework!”  
 b. U tom trenu ga ođalami tako jako...  
 in that moment him<sub>ACC</sub> slam<sub>AOR.3SG</sub> that strong  
 “And then (s)he slammed him with such a force...” (S-C; Todorović 2016: 187)

In this way, the aorist renders the types of meanings expressed by perfective aspect, rather than a past tense interpretation, as in Bulgarian and Macedonian. For this reason, Arsenijević (2013) and Todorović (2016) postulate that the aorist is a type of aspect, rather than tense in Serbo-Croatian.

Another property that distinguishes the usage of the simple past tenses in Serbo-Croatian in contrast to Bulgarian is that aorist forms may be marked only for perfective aspect, while the imperfect forms only for imperfective aspect. This restriction is exemplified in (8). It indicates that tense and aspect do not form independent systems in Serbo-Croatian, the way they do in Bulgarian (see examples (1) and (2) earlier in the paper).

- (S-C; Todorović 2016: 192)

(9) a. On je prodao svoje knjige  
 he is<sub>AUX</sub> sell<sub>PART.PERF.M.SG</sub> REFL books  
 “He sold his books”  
 b. On je godinama prodavao svoje knjige  
 he is<sub>AUX</sub> for-years sell<sub>PART.IMPREM.SG</sub> REFL books  
 “He was selling his books for years” (S-C)

However, the principal contrasts between aorist and imperfect forms in Bulgarian and the complex structures of the type presented in (9) is that the former constructions unambiguously describe events that occurred in the past. In other words, aorist and imperfect respectively characterize perfective and imperfective events, may combine with perfective and imperfective aspectual morphology, but these events always receive a past tense interpretation. This type of unambiguous temporal interpretation is missing in the constructions formed with the *l*-participle. Namely, in Serbo-Croatian the *l*-participle is found in structures that describe past events as in (9), but also in the so-called Future II forms, illustrated in (10).

- (S-C; Browne 2002: 331)

The most logical follow-up of the data presented in (9) and (10) seems to be then that the *l*-participle is entirely tenseless, the way other non-finite verbal forms are. Likewise, the auxiliary is not tense-marked, either, as it encodes person and number features and expresses aspectual distinctions (perfective in (10) and – diachronically at least – imperfective in (9)). The temporal interpretation of the structures in (9) and (10) comes only from the combination of the auxiliary verb and the participle, neither of which expresses tense independently. Therefore, neither of these elements needs to be assumed to be located in a tense-related projection such as T<sup>0</sup>.

Another point raised by an anonymous reviewer concerns the future tense in Serbo-Croatian, which is consistently expressed by a clitic form of

the auxiliary verb *ću* selecting an infinitival or a subjunctive complement, as illustrated in (11).

- (11) a. Ja            ću            te            zaboraviti  
           I            will<sub>1SG</sub>    you       forget<sub>INF</sub>  
           "I will forget you"  
       b. Zaboraviću            te  
           forget<sub>SUBJ</sub> + will<sub>1SG</sub>    you  
           "I will forget you" (S-C)

The reviewer suggests that the designated future tense auxiliaries *ću* could constitute evidence of a TP projection. However, *ću* is a grammaticalized form of the verb 'to want,' on a par with *will* in English, which has a clearly modal flavor. In general, the future tense is rather uncommon as an independent tense form crosslinguistically (see Kissine et al 2014), with the exception of languages such as Lithuanian, Latvian, Latin, and Ancient Greek, which as pointed out by another reviewer, have designated future tense morphology.

Another anonymous reviewer points out that the correlation between the absence of tense morphology and the availability of second position cliticization postulated in this paper is challenged by Upper and Lower Sorbian, which feature second position clitics, as illustrated for the reflexive clitic *so* in (12), and in which aorist and imperfect are still attested.<sup>2</sup>

- (12) a. Za            mnje    so            to            njehodži  
           for        me       REFL    this       not-suit<sub>PRES.3SG</sub>  
           "This does not suit me" (Sor; Wowčer 1955: 48)  
       b. Kniha    so            hižo    čišći  
           book    REFL    already   print<sub>PRES.3SG</sub>  
           "The book is already being printed" (Sor; Wowčer 1955: 135)

Stone (2002: 635–636) reports that although the simple tenses are used in the literary variants of both Upper and Lower Sorbian, they have disappeared from Lower Sorbian dialects, and in general they have been largely replaced by compound structures formed with the auxiliary 'be' and the *l*-participle. Crucially, Stone also observes that the aorist is possible only with perfective verbs, and the imperfect is formed only from imperfective verbs. Recall from the examples in (8) that this restriction also holds in Serbo-Croatian, a language with second position clitics. Therefore, Upper and Lower Sorbian are hardly counterexamples for the generalization postulated in this paper. In fact, I argued in

<sup>2</sup> Interestingly, Upper and Lower Sorbian are V2 languages (see Stone 2002: 653–654 and Joutiteau 2010), though in contrast to most Germanic languages, they display the V2 order also in subordinate clauses (in line with second position cliticization in Slavic). It could be hypothesized that the availability of the V2 order may have led to the maintenance of second position cliticization.

Migdalski (2016: 246–247) that the preclusion of imperfective forms of the aorist and perfective forms of the imperfect illustrated in (8) for Serbo-Croatian and described for Sorbian above initiated the process of language change that involves the loss of the semantic independence of tense from aspect. I assumed following Lightfoot (1979) that language change occurs during the process of language acquisition, when the child is exposed to a structure or a category that is ambiguous. If the child interprets such a structure in a different way than it was analyzed before, s/he may construct a new grammar that is different than the grammar of the previous generation of speakers, leading to an innovation. The grammatical structures in (8) are ambiguous because the aorist and imperfect tense forms are semantically indistinguishable from the aspectual variants, and as a result, they may potentially be analyzed as purely aspectual forms by the child acquiring the language. This ambiguity eventually led to a complete loss of overt morphological tense marking, which is observed in all contemporary Slavic languages except for Bulgarian and Macedonian, as will be exemplified now on the basis of Polish.

Thus, in Modern Polish, the only surviving form of aorist is the verb *rzecze* ‘s/he said,’ which has a bookish flavor, occurs only in the 3<sup>rd</sup> person singular, and is not recognized as describing past referentiality. Otherwise, past time reference is expressed by a combination of the former clitic variant of the auxiliary ‘be’ and the *l*-participle (see 13a). The *l*-participle is clearly tenseless, as it can also be the main verb in future structures, along with the infinitive. The main verb, which must be imperfective, is then accompanied by the perfective form of the auxiliary ‘be’ (see 13b). Alternatively, future time reference is rendered through the perfective forms of verbs in the present tense (see 13c).

- (13) a. Czytał-em                      książkę  
       read<sub>PART.M.SG</sub> +AUX<sub>1.SG</sub>      book<sub>ACC</sub>  
       “I read a book”
- b. Będę      czytał<sub>PART.M.SG</sub> /czytać<sub>INF</sub>      książkę  
       am<sub>PERF</sub>    read<sub>PART.M.SG</sub> /read<sub>INF</sub>      book<sub>ACC</sub>  
       “I will be reading a book”
- c. Przeczytam      książkę  
       read<sub>PERF.1.SG</sub>      book<sub>ACC</sub>  
       “I will read a book”
- (Pl)

With the loss of the aorist and the imperfect, all the Slavic languages except for Bulgarian and Macedonian lost overt exponents of tense morphology. The next section will show that this loss has repercussions for the syntax of clitics and the availability of second position effects.

## 5. Diachrony of tense and cliticization patterns in Slavic

The division of the Slavic languages with respect to the availability of tense morphology described in the previous section corresponds to the cliticization patterns described in the first part of this paper (Migdalski 2018): verb-adjacent clitics are only available in the languages with overt tense marking, while second position clitics are attested in the languages without tense morphology. This section shows that the diachronic development of the cliticization patterns in Slavic provides additional support for this division.

The discussion of the Old Slavic grammar is based on the language of the oldest religious relics, which is referred to as Old Church Slavonic. As far as its cliticization is concerned, it has been observed in the literature (see Radanović-Kocić 1988) that only three clitics were obligatorily located in second position in all contexts: the question/focus particle *li*, the complementizer clitic *bo* ‘because,’ and the focus particle *že* (see 14a–c). If there were more operator clitics present in a clause, they were all hosted adjacent to each other in second position (see 14d).

- (14) a. *Približi bo sę crstvie nbskoe*  
 approach<sub>AOR.3SG</sub> because REFL kingdom heaven  
 “For the kingdom of heaven is at hand”  
 (OCS; *Matthew* 3: 2; Radanović-Kocić 1988: 152)
- b. *Mati že jeho živěaše blizъ vratъ*  
 mother FOC his live<sub>IMP.3SG</sub> near gates  
 “And his mother lived near the gates” (OCS; Radanović-Kocić 1988: 152)
- c. *Ašte li oko tvoě lōkavo bōdetъ*  
 if Q eye your evil be<sub>PRES.SG.N</sub>  
 “If your eye should be evil” (OCS; *Matthew* 6: 23; Radanović-Kocić 1988: 151)
- d. *Ašte li že ni i novōjō razderetъ*  
 if Q FOC not also new tear<sub>FUT</sub>  
 “Or he will tear the new one” (OCS; *Luke* 5: 36; Pancheva et al. 2007)

Pronominal clitics, especially accusative clitics, were in most cases verb-adjacent, as illustrated in (2).

- (15) a. *Oca moego vъ těxъ dostoitъ mi byti*  
 father<sub>GEN</sub> my<sub>GEN</sub> in these be-appropriate<sub>PRES.3SG</sub> me<sub>DAT</sub> be<sub>INF</sub>  
 “I had to be in my Father’s house” (OCS; *Luke* 2: 49; Pancheva et al. 2007)
- b. *Ašte desnaě tvoě rōka sъblažnēetъ tę*  
 if right your hand sin<sub>PRES.3SG</sub> you<sub>ACC</sub>  
 “If your right hand causes you to sin”  
 (OCS; *Matthew* 5: 30; Radanović-Kocić 1988: 154)



The placement of dative clitics may at first sight appear to a little less regular. Radanović-Kocić (1988) analyzes the dative forms in (16a–b) as second position clitics, but they are also adjacent to the verb.

- (16) a. Ne        běxъ    li        ti        reklъ  
           NEG    was<sub>IMP.1SG</sub> Q        you<sub>DAT</sub>    tell<sub>PART.M.SG</sub>  
           “Did not I tell you?” (OCS; Radanović-Kocić 1988: 153)
- b. Sōdii    tę        předastъ        sloudzě  
           judge    you<sub>DAT</sub>    hand-over<sub>PRES.3SG</sub>    guard<sub>DAT</sub>  
           “The judge hands you over to the guard”  
           (OCS; *Matthew* 5: 21; Radanović-Kocić 1988: 156)

Some other cases assumed by Radanović-Kocić (1988) to exemplify second position dative clitic placement in Old Church Slavonic most likely involve ethical datives. These examples are quoted in (17). Recall from section 2.2 in Migdalski (2018) that ethical datives are operator clitics that occur higher in the structure than argumental datives, so it is not surprising that they are found in second position.

- (17) a. Ouže                    ti        neprijaznъ        ne        oudobъrajetъ  
           no-longer            you<sub>DAT</sub>    disfavor        not        rules  
           “Disfavor is no longer over you”  
           (OCS; *Codex Suprasliensis* 8: 17.2; Pancheva 2005: 116)
- b. Dobře    bo        ti        estъ  
           better    as        you<sub>DAT</sub>    is  
           “It is better for you” (OCS; *Matthew* 5: 30; Radanović-Kocić 1988: 153)

The distribution of ethical datives and the operator clitics exemplified in (14) shows that in Old Church Slavonic second position cliticization was restricted to Force-related contexts, the way it also is in the contemporary Slavic languages without pronominal second position cliticization.

With the exception of Bulgarian and Macedonian, in the languages that subsequently evolved we observe a gradual shift of pronominal clitics to second position.<sup>3</sup> In Migdalski (2013; 2015) I observe that timing of the shift matches the decline of tense morphology in the respective languages. In Old Slovenian, pronominal clitics are attested in second position already in *The Freising Manuscripts*, which is the oldest Slovenian manuscript dating from the 10<sup>th</sup>–11<sup>th</sup> century, as shown in (18), taken from Migdalski (2016: 266).

<sup>3</sup> In addition, Pancheva (2005) observes that in Old Bulgarian verb-adjacent clitics temporarily moved to second position.

- (18) a. I' vueruiú da mi ie na zem zuete bėvši  
 and believe<sub>1SG</sub> that me<sub>DAT</sub> is<sub>AUX</sub> on this world was<sub>PAST.ACT.PART</sub>  
 "And I believe that, having been in this world..."
- b. I da bim na zem zuete tacoga grecha pocazen vzel  
 and that be<sub>COND.1SG</sub> on this world such sin penance take<sub>PART.M.SG</sub>  
 "And that I may in this world accept penance for such sin"
- c. paki se uztati na zodni den. Imeti mi ie sivuot  
 again REFL rise<sub>INF</sub> on judgment day have<sub>INF</sub> me<sub>DAT</sub> is life  
 "And to rise again on the day of judgement. I am to have life"
- (10<sup>th</sup>–11<sup>th</sup> c. Slo; *Glagolite po naz redka zloueza*, *The Freising Manuscripts*)

The availability of second position pronominal cliticization in *The Freising Manuscripts* ties in with Vaillant's (1966: 60) observation that the simple tense structures were lost early in Old Slovenian, and in the earliest texts available the aorist was limited to certain verb forms (see also Lindstedt 1994: 35–36 for a detailed discussion). Notably, the structures given in (18) also contain complex tense structures formed with the auxiliary verb 'to be' and the tenseless *l*-participle, which were very rare in Old Church Slavonic.

In the history of Serbian, the decline of tense morphology coincides with the emergence of second position cliticization as well, but the change occurs considerably later than in Slovenian and is subject to cross-dialectal/language variation. Radanović-Kocić (1988: 157ff.) points out that initially the cliticization patterns found in the oldest Serbian texts from the 12<sup>th</sup>–15<sup>th</sup> centuries resemble the ones observed in Old Church Slavonic, with operator clitics always occurring after the first word. If there are other clitics present in the clause, they normally follow the operator clitics and also appear in second position. It must be noted though that in all the examples provided by Radanović-Kocić (1988: 157–158) from this period the pronominal clitics are also verb-adjacent.

- (19) a. Kto li ga ime taiti  
 who Q him<sub>ACC</sub> has hide<sub>INF</sub>  
 "Who will be hiding him" (OS; Radanović-Kocić 1988: 158)
- b. Ašte li se obrēte edno selo  
 if Q REFL finds one village  
 "If a village is found..." (OS; Radanović-Kocić 1988: 157)
- c. Tko li se nagje  
 who Q REFL finds  
 "Who is found" (OS; Radanović-Kocić 1988: 158)

In the absence of operator clitics, the other clitics may target second position as well, but there are frequent instances of pronominal clitics appearing lower in the structure, adjacent to the verb, following the distribution observed in Old Church Slavonic.

- (20) a. *Ė Stefan obekavaju se vamъ*  
 I Stefan promise REFL you  
 “I, Stefan, promise you” (OS; Radanović-Kocić 1988: 160)
- b. *I sie učiniv imъ*  
 and this do them<sub>DAT</sub>  
 “And having done that to them” (OS; Radanović-Kocić 1988: 160)
- c. *Da vi ni ste rekli*  
 that you<sub>PL</sub> us<sub>DAT</sub> are<sub>AUX</sub> tell<sub>PART.M.PL</sub>  
 “That you told us” (OS; Radanović-Kocić 1988: 160)

Notably, in compound tenses in Old Serbian pronominal clitics may also be verb-adjacent, while the auxiliary clitics occurs in second position (which I assume indicates that it is located in T<sup>0</sup>), as shown in (21). This is a different distribution to the one observed in contemporary Serbo-Croatian or in Old Slovenian (see 18 above), in which all the clitics uniformly target second position.

- (21) a. *Jakore e byla gnu ni dēdu ti*  
 as is<sub>AUX</sub> be<sub>PART.M.SG</sub> lord us<sub>DAT</sub> grandfather you<sub>DAT</sub>  
 “As it was to our lord your grandfather” (OS; Radanović-Kocić 1988: 161)
- b. *Dalo e krlvstvo mi*  
 give<sub>PART.M.SG</sub> is<sub>AUX</sub> majesty me<sub>DAT</sub>  
 “My majesty has given” (OS; Radanović-Kocić 1988: 161)
- c. *Koi e prъvo imъ bylъ*  
 which is<sub>AUX</sub> first them<sub>DAT</sub> be<sub>PART.M.SG</sub>  
 “Which was first to them” (OS; Radanović-Kocić 1988: 160)

Furthermore, Radanović-Kocić (1988: 161) observes a high frequency of verb-first clauses, in which all the clitics follow the initial verb. There are structures of different types, including questions, imperatives, and declarative clauses with preposed participles. Although all the clitics are in second position in these contexts, these structures are in fact ambiguous because the clitics can also be interpreted as verb-adjacent. Such clauses are also found in contemporary Bulgarian, which has verb-adjacent clitics.

- (22) a. *Obrete li se kto*  
 find Q REFL who<sub>NOM</sub>  
 “If someone is found” (OS; Radanović-Kocić 1988: 161)
- b. *Učine li mi pravdu*  
 do Q me<sub>DAT</sub> justice  
 “If they do me justice” (OS; Radanović-Kocić 1988: 162)
- c. *Dalb mi e carъ*  
 give<sub>PART.M.SG</sub> me<sub>DAT</sub> is<sub>AUX</sub> tzar  
 “The tzar gave it to me” (OS; Radanović-Kocić 1988: 162)

In the subsequent stages in the history of Serbo-Croatian, pronominal clitics shift to second position, but the switch is not uniform across structures and dialects. As pointed out by Radanović-Kocić 1988: 163), in the presence of operator clitics, all the clitics appear after the initial word.

- (23) a. On *bo je tako htio*  
 he because is<sub>AUX</sub> so want<sub>PART.M.SG</sub>  
 “Because he wanted so” (Adriatic Coast, 16<sup>th</sup> c.; Radanović-Kocić 1988: 163)
- b. Da *li ću iskati*  
 that Q want<sub>AUX.1SG</sub> seek<sub>INF</sub>  
 “Will I seek it” (Adriatic Coast, 16<sup>th</sup> c.; Radanović-Kocić 1988: 163)
- c. Nu *li se je na nje povratila*  
 or Q REFL is<sub>AUX</sub> to it<sub>ACC</sub> return<sub>PART.F.SG</sub>  
 “Or she returned to it” (Bosnia, 16<sup>th</sup> c.; Radanović-Kocić 1988: 163)

If there are no operator clitics present in the structure, we observe variation: in most cases the clitics are in second position, in particular in the more recent texts.

- (24) a. Tada *je glas onaj zagrmio*  
 then is<sub>AUX</sub> voice that sound<sub>PART.M.SG</sub>  
 “Then that voice sounded” (Croatia, 18–19<sup>th</sup> c.; Radanović-Kocić 1988: 164)
- b. Brižljiva *ga crkva ne pušta*  
 caring him<sub>ACC</sub> church NEG lets  
 “The caring church doesn’t let him” (Croatia, 19<sup>th</sup> c.; Radanović-Kocić 1988: 165)
- c. Ova *se čeljad ruga*  
 this REFL people mocks  
 “These people are mocking” (Adriatic Coast, 16<sup>th</sup> c.; Radanović-Kocić 1988: 165)

However, Radanović-Kocić (1988: 166–169) provides many examples in which pronominal clitics occur lower in the structure, adjacent to the verb.

- (25) a. Ona *starež ktio mi je učinit*  
 that old-man want<sub>PART.M.SG</sub> me<sub>DAT</sub> is<sub>AUX</sub> do<sub>INF</sub>  
 “That old man wanted to do me”  
 (Adriatic Coast, 16<sup>th</sup> c.; Radanović-Kocić 1988: 166)
- b. U *kom gradu najдох se veseli malo*  
 in which town find<sub>AOR.1SG</sub> REFL happy NEG little  
 “In which town I was very happy”  
 (Adriatic Coast, 16<sup>th</sup> c.; Radanović-Kocić 1988: 166)

In Migdalski (2013, 2015) I observe that the shift of pronominal clitics coincides with the loss of tense morphology. The correspondence has been illustrated in example (18) for Slovenian; see also Jung and Migdalski (2015) for evidence coming from the development of cliticization patterns and the decline

of tense morphology in Old Polish and Old Russian. In the case of Serbo-Croatian, the data with verb-adjacent pronominal clitics provided by Radanović-Kocić (1988) comes from older texts, such as the 16<sup>th</sup>-century examples in (25), whereas the sentence in (25b) contains a verb marked for the aorist.

Furthermore, in Migdalski (2013: 150) I note that Montenegrin texts display verb-adjacent cliticization as late as at the turn of the 18<sup>th</sup> and the 19<sup>th</sup> century, referring to the data reported in Radanović-Kocić (1988: 164–168) given in (26). Admittedly, the examples in (26a and c) are ambiguous, as if the clitics are verb-adjacent but also occur in second position, whereas (26c) is presented by Radanović-Kocić as a rather exceptional case of low clitic placement, in which the clitics are preceded by a complex prepositional phrase, and preceding the *l*-participle *uzvisio*. This type of low clitic placement was uncommon in earlier stages of Serbian.

- (26) a. Este      *li*      *se*      predali?  
          are<sub>2PL</sub>      Q      REFL      give-in<sub>PART.M.SG</sub>  
          “Did you give in?”      (Montenegro, 18/19<sup>th</sup> c.; Radanović-Kocić 1988: 164)
- b. Ako      iguman      sakrivi      *mi*...  
          if      prior      does-wrong      me<sub>DAT</sub>  
          “If the prior does me wrong...”  
          (Montenegro, 18/19<sup>th</sup> c.; Radanović-Kocić 1988: 166)
- c. Na      stepen      arhimandritski      *se*      uzvisio.  
          on      rank      archimandrite      REFL      rise<sub>PART.M.SG</sub>  
          “He rose to the rank of archimandrite”  
          (Montenegro, 18/19<sup>th</sup> c.; Radanović-Kocić 1988: 168)

I associate the verb-adjacent position of the clitics in (26) at the turn of the 18<sup>th</sup> and the 19<sup>th</sup> century with the fact that Montenegro is also the area which preserved aorist morphology for the longest period of time. Namely, Lindstedt (1994: 39) observes that a number of contemporary Montenegrin fiction writers still use the aorist as a narrative tense.

An anonymous reviewer challenges this observation, suggesting that Montenegrin was a second-position clitic-placing language in the 19<sup>th</sup> century. As an example, the reviewer provides the three successive opening lines from Njegoš's epic *Luča mikrokozma* ‘Ray of the Microcosm’ (1845), which all feature second position clitics, as presented in (27).

- (27) da      *mi*      svetu      otkrije      tainu  
          that      me<sub>DAT</sub>      holy<sub>ACC.SG</sub>      open<sub>PRES.3SG</sub>      secret<sub>ACC.SG</sub>  
          ali      *ga*      *je*      tvorac      ukrasio,  
          but      it<sub>ACC</sub>      is<sub>AUX</sub>      creator      decorate<sub>PART.M.SG</sub>  
          veliku      *mu*      knjigu      otvorio,  
          great<sub>ACC.SG</sub>      him<sub>DAT</sub>      book<sub>ACC.SG</sub>      open<sub>PART.M.SG</sub>  
          “that it should reveal the holy secret to me, but the Creator decorated it, opened a  
          great book to/for him...”      (Montenegro, 19<sup>th</sup> c.)

I observe, however, that although the language of the epic predominantly has second position clitics, it also displays a number of cases of verb-adjacent cliticization, which would be deemed ungrammatical in contemporary Serbo-Croatian. They are illustrated for dative clitics in (28) and for auxiliary clitics in (29), note also the aorist form of the verb *usliša* in (28c).

- (28) a. Na sva moja žarka ljubopitstva smijehom *mi* odgovara njenim  
 on all my heated questions smile<sub>DAT</sub> me<sub>DAT</sub> answer her  
 “She is answering all of my heated questions with a smile”  
 b. Drugo ništa ne predstavljaju *mi*  
 else nothing NEG represent me  
 “They are nothing else to me”  
 c. Kći nebesna usliša *mi* molbu  
 daughter heaven hear<sub>AOR,3SG</sub> me<sub>DAT</sub> prayer  
 “The daughter of the heavens heard my prayer” (Montenegro, 19<sup>th</sup> c.)
- (29) a. Tajna čojku čovjek *je* najviša  
 secret man<sub>DAT</sub> man<sub>NOM</sub> is secret  
 “Man is the highest secret to man”  
 b. Sudba naša otrova *je* čaša  
 destiny our poison<sub>GEN</sub> is glass  
 “Our destiny is a glass of poison” (Montenegro, 19<sup>th</sup> c.)

Moreover, although all contemporary dialects of Serbo-Croatian have second position clitics, southern Serbian dialects display some properties that are typical of languages with verb-adjacent clitics, such as clitic doubling, which is otherwise never attested in languages with second position clitics. Thus, Runić (2014) reports that Prizren-Timok Serbian shows optional clitic doubling with strong pronouns and (among some speakers) with proper names. See also Marušić and Žaucer (2009, 2010) for a discussion of clitic doubling in Gorica Slovenian.

- (30) a. Jesi *ga* njega pitaja za što *je* to tako?  
 are<sub>AUX,2SG</sub> him<sub>ACC</sub> him<sub>ACC</sub> asked why is that like that  
 “Did you ask him why this is the case?”  
 b. Ja *ga* Milovana poštujem  
 I him<sub>ACC</sub> Milovan<sub>ACC</sub> respect<sub>1SG</sub>  
 “I respect Milovan” (Prizren-Timok Serbian; Runić 2014: 21)

These facts indicate that preservation of tense morphology corresponds to both the availability of verb-adjacent cliticization as well as (residual) clitic doubling.

## 6. Toward an alternative generalization

The empirical facts presented in this paper so far indicate that tense morphology conditions the availability of verb-adjacent pronominal clitics. Diachronically, with the decline of tense morphology, the clitics shift to second position.<sup>4</sup> However, recall from section 3 in Migdalski (2018) that, as has been observed in the literature on the basis of the behavior of second position and verb-adjacent clitics in structures with ellipsis, clitic climbing, and clitic splits, the two patterns differ not only with respect to the position occupied by the clitics in the structure, but also in the type of the syntactic derivation involved. Namely, while each second position pronominal clitic undergoes XP-movement and lands in a separate specifier forming a syntactic constituent independently of the other clitics, verb-adjacent clitics cluster and all uniformly adjoin to a single head, creating a single constituent. This means that second position cliticization occurs when the pronominal clitics for some reason cannot cluster and adjoin to a single head. A question that arises concerns the property that precludes the clitic adjunction.

It is standardly assumed in the literature on cliticization in Romance languages, which all have verb-adjacent clitics, that pronominal clitics are syntactically ambiguous elements which display both phrasal and head-like properties (see, for example, Kayne 1991; Sportiche 1996; Chomsky 1995: 249). The clitics move from their XP theta-positions within VP, raise as phrasal constituents without violating the Head Movement Constraint, and adjoin to an inflectional/tense head as heads, in line with the Chain Uniformity Condition. Although the clitics are always adjacent to the verb, the issue that has been left open in the literature is whether the clitics adjoin directly to  $T^0$  or whether they adjoin to the verb in a lower position, and then move together with the verb to  $T^0$  (see Matushansky 2006). For the purpose of the discussion here, the timing of the operation is immaterial, as it may depend on whether the verb reaches  $T^0$  in a particular language. What matters though is that verb-adjacent cliticization is contingent on the availability of  $T^0$ .

The movement of clitics to  $T^0$  has been motivated in the literature in different ways. For instance, Nash and Rouveret (2002: 177) attribute the cliticization on  $T^0$  to a requirement that clitics become adjoined to a category that carries active *phi*-features. Some other proposals assume that clitics adjoin to  $T^0$  due to PF conditions. For example, Belletti (1999: 550) argues that pronominal clitics are located in Agr projections before raising to  $T^0$ . She assumes that Agr projections are weak heads, which entails that they may not contain any lexical material that has semantic import at PF. She proposes therefore that the Agr projections

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<sup>4</sup> Jung and Migdalski (2015) show that second position clitics may subsequently be reinterpreted as weak pronouns, as happened in Old Russian and Old Polish.

must be emptied before Spell-Out, which leads to the clitic adjunction to  $T^0$ . Correspondingly, Bošković (2016) account discussed in Migdalski (2018) posits that clitic adjunction to  $T^0$  is due to a PF dependency. Under his account pronominal clitics are D-heads. Since functional heads cannot be stranded, pronominal clitics assume a head-adjunction configuration by adjoining to  $T^0$ , which in addition allows them to check case through incorporation.

Irrespective of the actual reason for the clitic movement to  $T^0$ , it is evident that  $T^0$  is crucial for licensing verb-adjacent clitics.<sup>5</sup> The Slavic facts addressed in this paper indicate that verb-adjacent cliticization is possible when tense morphology is available. I propose to combine these two requirements by suggesting that  $T^0$  is only present in those languages that have tense morphology. Tense morphology enables the projection of  $T^0$ , which in turn makes verb-adjacent cliticization possible. Thus, I argue that the reason why second position clitics do not cluster and do not adjoin to  $T^0$  is because  $T^0$  is missing given the absence of tense morphology in these languages. More generally, this proposal implies that TP is not a universal projection (as also suggested by Bošković 2012 and in the other accounts discussed below), and in the case of Slavic, it is available only in Bulgarian and Macedonian. Admittedly, since TP is a core syntactic projection, it may be controversial to postulate that its occurrence is subject to parametric variation. However, given that TP is associated with a number of undisputed syntactic properties, such as nominative case assignment, it may be easier to test the predictions of this proposal by investigating whether the respective TP-related properties are observed in TP-less languages.

The idea that TP is not a universal projection has in fact been pursued in many diachronic studies. For example, according to Van Gelderen (1993), the presence of TP is a matter of parametric variation, and in the case of English, the TP layer emerges at the end of the Middle English period (ca. 1380) and coincides with the rise of *do*-support. Likewise, Kiparsky (1996) posits that the rise of  $T^0$  (his  $I^0$ ) is contemporaneous with the OV to VO shift in Germanic. Taking a more general perspective, Osawa (1999) adopts a TP-less analysis of Old English, referring to a widespread assumption made in historical Indo-Europeanist research that the emergence of aspectual morphology predates the rise of morphological tense. She argues that tense and aspect developed independently as they are conceptually different; her argumentation is further supported by the observation made in the literature on first language acquisition. Namely, crosslinguistic acquisition data examined by Tsimpili (1996) show that children recognize aspectual distinctions at the prefunctional stage, whereas functional categories, including Tense, emerge considerably later.

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<sup>5</sup> An anonymous reviewer states that finding this correlation does not automatically mean causation, and that there may be a third factor that conditions both. Still, the analyses of Romance cliticization quoted in the preceding paragraph relate to different properties of  $T^0$  to explain verb-adjacent cliticization, and tense-encoding is one of them.



Synchronically, it has been proposed that TP may be missing even in some of the languages that have tense morphology. For example, Haider (2010) argues for a TP-less analysis of German. He shows that with the exception of V2 structures, the verb uniformly remains in its base position within VP. He also finds substantial counterevidence against the IP/TP layer in German, such as the unavailability of expletives in the middle field in subjectless clauses, the lack of V-to-I verb movement, and the possibility of extraction out of a subject (as shown in 31a), which is otherwise precluded in languages such as English, in which the subject targets Spec, TP (see 31b).

- (31) a. Mit wem<sub>i</sub> hätte denn [t<sub>i</sub> speisen zu dürfen] dich mehr gefreut?  
       with whom had PRT dine to be-allowed you<sub>ACC</sub> more pleased  
       b. \*Whom<sub>i</sub> would [to have dinner with t<sub>i</sub>] please you?  
       b'. Who<sub>i</sub> would it please you [to have dinner with t<sub>i</sub>]?

(Haider 2010: 208)

Recently, Bošković (2012) presented crosslinguistic evidence for the non-universality of TP, arguing in addition that that TP is projected only in those languages that also project the DP layer in the nominal domain; that is, in the languages with articles. He finds support for the TP/DP parallelism in Chomsky's (1986) proposal that Spec, DP is the landing site of the counterpart of movement to Spec, TP in nominalizations such as *John's destruction of the city*. This parallelism is also supported by Giusti's (2012: 205) observation that since possessors perform the grammatical function of 'subjects' in noun phrases, DPs are the counterparts of TPs because in many languages determiners are in complementary distribution with possessors (including both genitive DPs and possessive pronouns).

Bošković (2012) shows that TP-less languages display a number of properties which can be straightforwardly explained on the proviso that the TP projection is not universally present. For instance, these languages lack expletives. Given that the role of expletives is to satisfy the EPP, which is a requirement of the TP layer, expletives need not be present in languages that lack TP. Furthermore, Bošković observes that TP-less languages differ from TP-languages with respect to the choice of the default case. The default case is the case that is used in out of the blue contexts. Slavic languages as well as Turkish, Hindi, and Korean use nominative case as the default case, whereas in TP-languages such as English and French the default case is accusative, as shown in (32).

- (32) a. \*Mnie/Ja                    inteligentny?!                    (Polish)  
       me<sub>ACC</sub>/I<sub>NOM</sub>                intelligent  
       b. Me/\*I                    intelligent?!

Nominative case assignment is a well-established TP-related property. It is likely that nominative case does not need to be licensed by T<sup>0</sup> in TP-less languages as it is the default case option that is licensed without assignment. In

TP-languages accusative is the default case, and nominative requires Spec, TP configuration for licensing.<sup>6</sup>

The final contrast between the two types of languages observed by Bošković is the phenomenon of the sequence of tense, which is found only in languages with the TP layer. Since it is a tense-related property, it is expected that it requires the presence of TP.

Bošković's (2012) generalization has led to further observations of systematic differences between TP- and TP-less languages. For instance, Todorović (2016) notes a contrast with respect to finiteness mismatches in VP-ellipsis, which are tolerated in languages without TP such as Serbo-Croatian, but not in TP-languages such as European Portuguese. Likewise, Kang (2014) postulates a TP-less analysis of Korean on the basis of her observations of contrasts between Korean and TP-languages with respect to *A'*-movement out of CP, Numerical Quantifier Floating, and successive-cyclic movement with binding ambiguities.

Although the idea of the DP-TP parallelism is a crucial ingredient of Bošković's (2012) analysis, Bošković (2016) does not refer to it in his account of second position cliticization. As was mentioned earlier in this paper, Bošković (2016) postulates the condition that says that verb-adjacent clitics are D-heads, thus they are available only in languages with articles. The Slavic languages provide ample support for the DP-TP parallelism, as the article languages are also those that have tense morphology. In this regard, an anonymous reviewer points out that if the DP-TP correlation holds, it could be that both generalizations hold: verb-adjacent clitics are attested in languages with both tense morphology as well as articles. Contemporary Slavic and Romance languages indicate that this is indeed the case. However, the diachronic evidence presented in this paper shows that the property which conditions the availability of verb-adjacent clitics is the presence of tense morphology, rather than articles. As was demonstrated in section 4, Old Church Slavonic and the oldest variants of some Slavic languages had verb-adjacent clitics and simple past tenses. Still, they most likely did not project the DP layer, as they displayed numerous instances of Left Branch Extraction, which is typical of DP-less languages. This fact may indicate, pending further research, that Bošković's generalization

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<sup>6</sup> An anonymous reviewer asks whether the Slavic languages with the TP projection are expected to pattern with English with respect to other TP-related properties, such as *do*-support, accusative rather than nominative as the default case, and expletive subjects. I suggest that they do not because there are other grammatical requirements that must be fulfilled for these properties to be observed. For instance, Bulgarian and Macedonian do not have expletive subjects because they are null-subject languages. Correspondingly, Bošković (2012) points out that DP-languages respect superiority in multiple *wh*-questions. However, this property is observed in only those DP-languages that allow multiple *wh*-questions in the first place. The reviewer reminds me of Progovac's (2013) work, which explores the contrasts between the English-style TP and nominative case versus default nominative case assignment in Slavic. Due to space constraints, I am not able to discuss these contrasts in this paper.

concerning the DP-TP parallelism could be a one-way correlation: languages with articles have tense morphology, but the reverse is not necessarily true.

On a more general level, the analysis developed in this paper creates a link between two second position effects: second position cliticization and V2. The idea that V2 is dependent on Tense marking was already assumed in Den Besten (1977/1983), one of the earliest accounts of V2. Den Besten (1977/1983) observes that the elements located in C<sup>0</sup> express tense: it is either the finite verb in V2 clauses or the complementizer, which may surface in different forms (such as *that* and *for* in English) depending on the finiteness status of a clause. He argued therefore that the verb may target (and replace) the complementizer position in Germanic via a structure-preserving substitution. Den Besten's observation was adopted in many subsequent analyses, for instance in Koster's (2003) assumption that complementizers must express Tense, given that in languages such as Dutch and German they are in complementary distribution with finite verbs. Since complementizers also determine a specific clause type, Koster argues that complementizers are combined Type/Tense markers, which express both the clause type of a sentence and the scope of its Tense operator. Correspondingly, Roberts and Roussou (2002) jointly reduce the V2 and EPP to a T-dependency. Namely, they propose that the subject is realized when T is spelled out in TP, while the V2 requirement occurs when T is in the CP domain.

Outside Germanic, Storto (1999) shows Karitiana provides strong empirical evidence for the tense dependency of V2 clauses. Karitiana allows V2 orders only with tense-marked verbs. Subordinate clauses contain no tense markers, or they have an unmarked verbal suffix indicating present or past tense, and the verb is clause-final, on a par with continental Germanic. Given these crosslinguistic observations, Jouitteau (2010) puts forward a generalization saying that second position phenomena (not just V2) may only occur in tensed domains. This paper gives additional support for this generalization on the basis of the distribution and the diachrony of second position cliticization in Slavic, which as has been shown is contingent on the availability of tense morphology.

## 7. Conclusion

This paper investigated two second position effects, the V2 order and second position cliticization. It has argued that these effects may occur as a result of two distinct requirements: overt illocutionary force marking and tense dependency. This paper has also examined the implications of Bošković's (2016) generalization concerning the distribution of second position clitics, which restricts their occurrence to languages without articles. It has been shown that while the generalization is empirically correct, it is conceptually problematic,

as it requires an unwarranted division of pronominal clitics into functional and lexical elements depending on their type of cliticization. Furthermore, the generalization does not receive support from diachronic considerations, given that Old Slavic languages had verb-adjacent clitics and did not have articles, whereas second position cliticization developed without any modification of the DP/NP structure. This paper proposes an alternative generalization, which relates the type of cliticization to the availability of tense morphology. In this way, it provides a link to V2 contexts, which have been argued in the literature to be restricted to tensed environments.

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